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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/083,292	02/27/2002	Manabu Nohara	107156-00099	5530

7590 06/22/2005

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EXAMINER	
EWART, JAMES D	
ART UNIT	PAPER NUMBER
2683	

DATE MAILED: 06/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/083,292	NOHARA, MANABU	
	Examiner	Art Unit	
	James D. Ewart	2683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *3-12,15-22,25-32,35-44 and 47-54* is/are allowed.

6)☒ Claim(s) *1,2,13,14,23,24,33,34,45 and 46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12-29-2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless – (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 13, 23, 33 and 45 are rejected under 35 U.S.C. 102(e) as being anticipated by Fattouche et al. (U.S. Patent No. 6,266,014).

Referring to claims 1 and 13, Fattouche et al. teaches a positioning apparatus for determining a present position of a mobile station by using radio waves coming from a plurality of base stations arranged within a communication area (Figure 2), the positioning apparatus being arranged in said mobile station (Figure 2 and Column 4, Lines 22-25), the positioning apparatus comprising: receiving means for receiving the radio waves coming from said plurality of base stations to generate reception signals corresponding to the respective radio waves (Figure 2 and Column 4, Lines 22-23); direct wave candidate extracting means for extracting a plurality of direct wave candidates of the radio waves coming from said respective base stations, out of said reception signals generated by said receiving means (Column 33, Lines 46-52); deriving means for deriving reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said direct wave candidate extracting means (Column 33, Lines 46-52);

and positioning operation means for determining the present position of said mobile station from said reception signals derived by said deriving means (Column 4, Lines 23-25).

Referring to claim 23, Fattouche et al. teaches a positioning system for determining a present position of a mobile station lying within a communication area, a plurality of base stations being arranged within said communication area (Figure 2), said mobile station comprising: receiving means for receiving radio waves coming from said plurality of base stations to generate reception signals corresponding to the respective radio waves (Figure 2 and Column 4, Lines 22-23); direct wave candidate extracting means for extracting a plurality of direct wave candidates of the radio waves coming from said respective base stations, out of said reception signals generated by said receiving means (Column 33, Lines 46-52); deriving means for deriving reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said direct wave candidate extracting means (Column 33, Lines 46-52); and positioning operation means for determining the present position of said mobile station from said reception signals derived by said deriving means (Column 4, Lines 23-25), wherein the present position of said mobile station is determined on the mobile-station side by using the radio waves coming from a plurality of base stations arranged within said communication area to said mobile station (Figure 2 and Column 4, Lines 22-25).

Referring to claim 33, Fattouche et al. teaches a positioning apparatus for determining a present position of a mobile station by using radio waves coming from a plurality of base stations arranged within a communication area (Figure 2), the positioning apparatus being arranged in

said mobile station (Figure 2 and Column 4, Lines 22-25), the positioning apparatus comprising: a receiving unit which receives the radio waves coming from said plurality of base stations to generate reception signals corresponding to the respective radio waves (Figure 2 and Column 22-23); a range measuring unit which extracts a plurality of direct wave candidates of the radio waves coming from said respective base stations, out of said reception signals generated by said receiving unit (Column 33, Lines 46-52); a direct wave detecting unit which derives reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said range measuring unit (Column 33, Lines 46-52); and a position computing unit which determines the present position of said mobile station from said reception signals derived by said direct wave detecting unit (Column 4, Lines 23-25). The range of peaks selected, is for the pilot signal being measured and does not include the peaks from any subsequent pilot signals. Examiner interprets the device that provides the range of peaks selected as the range measuring unit.

Referring to claim 45, Fattouche et al. teaches a positioning system for determining a present position of a mobile station lying within a communication area (Figure 2 and Column 4, Lines 22-25), a plurality of base stations being arranged within said communication area (Figure 2), said mobile station comprising: a receiving unit which receives radio waves coming from said plurality of base stations to generate reception signals corresponding to the respective radio waves (Figure 2 and Column 4, Lines 22-23); a range measuring unit which extracts a plurality of direct wave candidates of the radio waves coming from said respective base stations, out of said reception signals generated by said receiving unit (Column 33, Lines 46-52); a direct wave

detecting unit which derives reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said range measuring unit (Column 33, Lines 46-52); and a position computing unit which determines the present position of said mobile station from said reception signals derived by said direct wave detecting unit (Column 4, Lines 23-25), wherein the present position of said mobile station is determined on the mobile-station side by using the radio waves coming from a plurality of base stations arranged within said communication area to said mobile station (Column 4, Lines 22-25). The range of peaks selected, is for the pilot signal being measured and does not include the peaks from any subsequent pilot signals. Examiner interprets the device that provides the range of peaks selected as the range measuring unit.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 2, 14, 24, 34 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (U.S. Patent No. 6,310,576) and further in view of Fattouche et al..

Referring to claims 2 and 14, Johnson teaches a positioning apparatus for determining a present position of a mobile station by using radio waves coming from said mobile station to a plurality of base stations arranged within a communication area (Column 4, Line 34 to Column 5, Line 27), the positioning apparatus being arranged on the base-station side (Column 5, Lines

22-26), the positioning apparatus comprising: receiving means for receiving the radio waves coming from said mobile station to generate reception signals corresponding to the respective radio waves (Figure 2), said receiving means being arranged in each of said plurality of base stations (Figure 2), but does not teach direct wave candidate extracting means for extracting a plurality of direct wave candidates of the radio waves, out of said reception signals generated by said receiving means; deriving means for deriving reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said direct wave candidate extracting means; and positioning operation means for determining the present position of said mobile station from said reception signals derived by said deriving means. Fattouche et al. teaches direct wave candidate extracting means for extracting a plurality of direct wave candidates of the radio waves, out of said reception signals generated by said receiving means (Column 33, Lines 46-52); deriving means for deriving reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said direct wave candidate extracting means (Column 33, Lines 46-52); and positioning operation means for determining the present position of said mobile station from said reception signals derived by said deriving means (Column 4, Lines 23-25). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Johnson with the teaching of Fattouche et al. of direct wave candidate extracting means for extracting a plurality of direct wave candidates of the radio waves, out of said reception signals generated by said receiving means; deriving means for deriving reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said direct wave candidate extracting means; and positioning operation means for determining the present position of said mobile station from

said reception signals derived by said deriving means to determine the peak that results from the direct wave (Column 33, Lines 3-9).

Referring to claim 24, Johnson teaches a positioning system for determining a present position of a mobile station lying in a communication area (Column 4, Line 34 to Column 5, Line 27), a plurality of base stations being arranged within said communication area (Figure 2), the positioning system comprising: receiving means for receiving radio waves coming from said mobile station to generate reception signals corresponding to the respective radio waves (Figure 2), said receiving means being arranged in each of said plurality of base stations (Figure 2); wherein the present position of said mobile station is determined by using radio waves coming from said mobile station to a plurality of base stations arranged within said communication area (Column 4, Line 34 to Column 5, Line 27), but does not teach direct wave candidate extracting means for extracting a plurality of direct wave candidates of the radio waves coming to said respective base stations, out of said reception signals generated by said receiving means; deriving means for deriving reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said direct wave candidate extracting means; and positioning operation means for determining the present position of said mobile station from said reception signals derived by said deriving means, wherein the present position of said mobile station is determined on the mobile-station side. Fattouche et al. teaches direct wave candidate extracting means for extracting a plurality of direct wave candidates of the radio waves coming to said respective base stations, out of said reception signals generated by said receiving means (Column 33, Lines 46-52); deriving means for deriving reception signals equivalent to direct

waves from said plurality of direct wave candidates extracted by said direct wave candidate extracting means (Column 33, Lines 46-52); and positioning operation means for determining the present position of said mobile station from said reception signals derived by said deriving means, wherein the present position of said mobile station is determined on the mobile-station side (Column 4, Lines 22-25). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Johnson with the teaching of Fattouche et al. teaches of wave candidate extracting means for extracting a plurality of direct wave candidates of the radio waves coming to said respective base stations, out of said reception signals generated by said receiving means; deriving means for deriving reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said direct wave candidate extracting means; and positioning operation means for determining the present position of said mobile station from said reception signals derived by said deriving means, wherein the present position of said mobile station is determined on the mobile-station side to determine the peak that results from the direct wave (Column 33, Lines 3-9).

Referring to claim 34, Johnson teaches a positioning apparatus for determining a present position of a mobile station by using radio waves coming from said mobile station to a plurality of base stations arranged within a communication area (Column 4, Line 34 to Column 5, Line 27), the positioning apparatus being arranged on the base-station side (Column 5, Lines 23-26), the positioning apparatus comprising: a receiving unit which receives the radio waves coming from said mobile station to generate reception signals corresponding to the respective radio waves (Figure 2), said receiving unit being arranged in each of said plurality of base stations

(Figure 2), but does not teach a range measuring unit which extracts a plurality of direct wave candidates of the radio waves coming to said respective base stations, out of said reception signals generated by said receiving unit; a direct wave detecting unit which derives reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said range measuring unit; and a position computing unit which determines the present position of said mobile station from said reception signals derived by said direct wave detecting unit. Fattouche et al. teaches a range measuring unit which extracts a plurality of direct wave candidates of the radio waves coming to said respective base stations, out of said reception signals generated by said receiving unit (Column 33, Lines 46-52); a direct wave detecting unit which derives reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said range measuring unit (Column 33, Lines 46-52); and a position computing unit which determines the present position of said mobile station from said reception signals derived by said direct wave detecting unit (Column 4, Lines 23-25). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the teaching of Johnson with the teaching of Fattouche et al. of a range measuring unit which extracts a plurality of direct wave candidates of the radio waves coming to said respective base stations, out of said reception signals generated by said receiving unit; a direct wave detecting unit which derives reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said range measuring unit; and a position computing unit which determines the present position of said mobile station from said reception signals derived by said direct wave detecting unit to determine the peak that results from the direct wave (Column 33, Lines 3-9). The range of peaks selected, is for the pilot signal being

measured and does not include the peaks from any subsequent pilot signals. Examiner interprets the device that provides the range of peaks selected as the range measuring unit.

Referring to claim 46, Johnson teaches a positioning system for determining a present position of a mobile station lying in a communication area (Column 4, Line 34 to Column 5, Line 27), a plurality of base stations being arranged within said communication area (Figure 2), the positioning system comprising: a receiving unit which receives radio waves coming from said mobile station to generate reception signals corresponding to the respective radio waves (Figure 2), said receiving unit being arranged in each of said plurality of base stations (Figure 2); wherein the present position of said mobile station is determined on the base-station side by using radio waves coming from said mobile station to a plurality of base stations arranged within said communication area (Column 4, Line 34 to Column 5, Line 27), but does not teach a range measuring unit which extracts a plurality of direct wave candidates of the radio waves coming to said respective base stations, out of said reception signals generated by said receiving unit; a direct wave detecting unit which derives reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said range measuring unit; and a position computing unit which determines the present position of said mobile station from said reception signals derived by said direct wave detecting unit. Fattouche et al. teaches a range measuring unit which extracts a plurality of direct wave candidates of the radio waves coming to said respective base stations, out of said reception signals generated by said receiving unit (Column 33, Lines 46-52); a direct wave detecting unit which derives reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said range measuring unit

(Column 33, Lines 46-52); and a position computing unit which determines the present position of said mobile station from said reception signals derived by said direct wave detecting unit (Column 4, Lines 23-25). Therefore at the time the invention was made, it would have been obvious to a person of ordinary skill in the art to combine the art of Johnson with the teaching of Fattouche et al. of a range measuring unit which extracts a plurality of direct wave candidates of the radio waves coming to said respective base stations, out of said reception signals generated by said receiving unit; a direct wave detecting unit which derives reception signals equivalent to direct waves from said plurality of direct wave candidates extracted by said range measuring unit; and a position computing unit which determines the present position of said mobile station from said reception signals derived by said direct wave detecting unit to determine the peak that results from the direct wave (Column 33, Lines 3-9). The range of peaks selected, is for the pilot signal being measured and does not include the peaks from any subsequent pilot signals. Examiner interprets the device that provides the range of peaks selected as the range measuring unit.

Allowable Subject Matter

3. Claims 3-12, 15-22, 25-32, 35-44 and 47-54 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Referring to claims 3, 15, 25, 35 and 47, the references sited do not teach wherein said direct wave candidate extracting means extracts said direct wave candidates out of reception

signals generated from radio waves coming to said receiving means within predetermined time since the point of start of positioning.

Referring to claims 7, 19, 29, 39 and 51 the references sited do not teach wherein: said direct wave candidate extracting means extracts a plurality of direct wave candidates with respect to each of the radio waves coming from three base stations to said mobile station; said deriving means performs a first direct wave deriving process of performing positioning operations on combinations of direct wave candidates to determine approximate positions of said mobile station and positioning errors in said approximate positions for said respective combinations and deriving said direct wave candidate corresponding to a positioning error of minimum value among said positioning errors determined for said respective combinations as said reception signal corresponding to the direct wave coming from a third base station out of said three base stations to said mobile station, said combinations being obtained by fixing two direct wave candidates selected in ones from among direct wave candidates corresponding to said first and second base stations while using direct wave candidates corresponding to said third base station as variables, a second direct wave deriving process of performing positioning operations on combinations of direct wave candidates to determine approximate positions of said mobile station for a second time and positioning errors in said approximate positions for a second time and deriving said direct wave candidate corresponding to a positioning error of minimum value among said positioning errors determined for the second time as said reception signal corresponding to the direct wave coming from said second base station to said mobile station, said combinations being obtained by fixing said direct wave candidate derived as said

reception signal resulting from the direct wave coming from said third base station in said first direct wave deriving process and a direct wave candidate selected from among direct wave candidates corresponding to said first base station while using direct wave candidates corresponding to said second base station as variables, and a third direct wave deriving process of performing positioning operations on combinations of direct wave candidates to determine approximate positions of said mobile station for a third time and positioning errors in said approximate positions for a third time and deriving said direct wave candidate corresponding to a positioning error of minimum value among said positioning errors determined for the third time as said reception signal corresponding to the direct wave coming from said first base station to said mobile station, said combinations being obtained by fixing said direct wave candidate derived as said reception signal resulting from the direct wave coming from said third base station in said first direct wave deriving process and said direct wave candidate derived as said reception signal resulting from the direct wave coming from said second base station in said second direct wave deriving process while using direct wave candidates corresponding to said first base station as variables; and said positioning operation means determines the present position of said mobile station from three reception signals corresponding to the three direct waves from said first, second, and third base stations, said reception signals being obtained in said first, second, and third direct wave deriving processes.

Referring to claims 8, 20, 30, 40 and 52 the references sited do not teach wherein: said direct wave candidate extracting means extracts a plurality of direct wave candidates with respect to each of the radio waves coming from a plurality of base stations to said mobile station;

said deriving means obtains a plurality of combinations of direct wave candidates by combining direct wave candidates selected in ones from among those of said respective base stations extracted by said direct wave candidate extracting means, determines approximate positions of said mobile station and positioning errors in said approximate positions from said plurality of combinations, respectively, and derives said direct wave candidates contained in a combination corresponding to said positioning error of minimum value as said reception signals corresponding to the direct waves respectively coming from said plurality of base stations to said mobile station; and said positioning operation means determines the present position of said mobile station from said reception signals corresponding to the direct waves respectively coming from said plurality of base stations, derived by said deriving means.

Referring to claims 9, 21, 31, 41 and 53 the references sited do not teach wherein: said direct wave candidate extracting means extracts a plurality of direct wave candidates with respect to each of the radio waves coming from said mobile station to three base stations; said deriving means performs a first direct wave deriving process of performing positioning operations on combinations of direct wave candidates to determine approximate positions of said mobile station and positioning errors in said approximate positions for said respective combinations and deriving said direct wave candidate corresponding to a positioning error of minimum value among said positioning errors determined for said respective combinations as said reception signal corresponding to the direct wave coming from said mobile station to a third base station out of said three base stations, said combinations being obtained by fixing two direct wave candidates selected in ones from among direct wave candidates corresponding to said first

and second base stations while using direct wave candidates corresponding to said third base station as variables, a second direct wave deriving process of performing positioning operations on combinations of direct wave candidates to determine approximate positions of said mobile station for a second time and positioning errors in said approximate positions for a second time and deriving said direct wave candidate corresponding to a positioning error of minimum value among said positioning errors determined for the second time as said reception signal corresponding to the direct wave coming from said mobile station to said second base station, said combinations being obtained by fixing said direct wave candidate derived as said reception signal resulting from the direct wave coming to said third base station in said first direct wave deriving process and a direct wave candidate selected from among direct wave candidates corresponding to said first base station while using direct wave candidates corresponding to said second base station as variables, and a third direct wave deriving process of performing positioning operations on combinations of direct wave candidates to determine approximate positions of said mobile station for a third time and positioning errors in said approximate positions for a third time and deriving said direct wave candidate corresponding to a positioning error of minimum value among said positioning errors determined for the third time as said reception signal corresponding to the direct wave coming from said mobile station to said first base station, said combinations being obtained by fixing said direct wave candidate derived as said reception signal resulting from the direct wave coming to said third base station in said first direct wave deriving process and said direct wave candidate derived as said reception signal resulting from the direct wave coming to said second base station in said second direct wave deriving process while using direct wave candidates corresponding to said first base station as

variables; and said positioning operation means determines the present position of said mobile station from reception signals corresponding to the direct waves from said mobile station to said first, second, and third base stations, said reception signals being obtained in said first, second, and third direct wave deriving processes.

Referring to claims 10, 22, 32, 42 and 54 the references sited do not teach wherein: said direct wave candidate extracting means extracts a plurality of direct wave candidates with respect to each of the radio waves coming from said mobile station to a plurality of base stations; said deriving means obtains a plurality of combinations of direct wave candidates by combining direct wave candidates selected in ones from among those of said respective base stations extracted by said direct wave candidate extracting means, determines approximate positions of said mobile station and positioning errors in said approximate positions from said plurality of combinations, respectively, and derives said direct wave candidates contained in a combination corresponding to said positioning error of minimum value as said reception signals corresponding to the direct waves respectively coming from said mobile station to said plurality of base stations; and said positioning operation means determines the present position of said mobile station from said reception signals corresponding to the direct waves respectively coming to said plurality of base stations, derived by said deriving means.

Referring to claims 11 and 43 the references sited do not teach a positioning apparatus comprising first positioning means including said receiving means, said direct wave candidate extracting means, said deriving means, and said positioning operation means, further comprising:

second positioning means for determining the present position of said mobile station by using the GPS; and control means for switching to the positioning by said second positioning means in cases where the present position of said mobile station determined by said first positioning means exceeds a predetermined positioning error.

Referring to claims 12 and 44 the references sited do not teach a positioning apparatus comprising first positioning means including said receiving means, said direct wave candidate extracting means, said deriving means, and said positioning operation means set forth in claim 1, further comprising: second positioning means for determining the present position of said mobile station by using the GPS; power supply means for supplying driving power to said first and second positioning means; and power supply control means for detecting a remaining amount of charge of said power supply means and switching the supply of said driving power from said power supply means between said first positioning means and said second positioning means, depending on the remaining amount of charge detected.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Atarius U.S. Patent No. 6,356,608 discloses method, apparatus and system for determining a location of a frequency synchronization signal.

Duffett-Smith et al. U.S. Patent No. 6,342,854 discloses position determining system.

Hunzinger U.S. Patent Publication No. 2002/0142726 discloses pilot phase measurement error estimator for position location.

Tekinay U.S. Patent No. 6,414,634 discloses detecting the geographical location of wireless units.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Ewart whose telephone number is (571) 272-7864. The examiner can normally be reached on M-F 7am - 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571)272-7872. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Ewart
June 16, 2005

WILLIAM TROST
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600